

Arizona's Instrument to Measure Standards (AIMS)

Grade 6

Writing, Reading, and Mathematics

Released Items

January 7, 2008

AIMS Grade 6 Released Items

As part of Superintendent Tom Horne's ongoing efforts to improve the communication of academic expectations, the Arizona Department of Education is releasing AIMS DPA Grades 3 through 8 writing, reading, and mathematics items to the public. This release is intended to provide students, parents, teachers, and the community with specific examples of the types of skills being assessed on the AIMS tests. The release begins with writing, followed by reading and mathematics, similar to the AIMS tests.

Included in this release is a previous writing prompt and directions used in the AIMS assessments. Following the writing prompt section are a reading passage, directions, and the items associated with the passage in the form of a mini-test. This passage and related items are from the 2005 and 2006 AIMS administrations. At the conclusion of the reading section, the individual items are presented again with the correct answers and statistical information about each item.

The final section consists of ten mathematics items from the 2006 and 2007 AIMS administrations in the form of a mini-test. At the conclusion of the mathematics section, the individual items are presented again with the correct answers and statistical information about each item.

The statistical information includes:

- 1) item identification number;
- 2) correct answer;
- 3) response probability (P-Value), which represents the percentage of students who answered the question correctly;
- 4) Rasch difficulty, which measures the difficulty of the item on a scale in which -3 indicates a very easy item and +3 indicates an extremely difficult item; and
- 5) performance objective that the item aligns to in the 2003 standards.

The items are reproductions of the actual items as they appeared on the AIMS tests. If you have any questions, please contact Frank Brashear, Director of Test & Item Development, at (602) 542-5031.

WRITING

WRITING

Writing

Directions:

Read the writing prompt below. Use the next page for your prewriting and planning. Then write your draft on pages 6 and 7.

Everybody enjoys having free time, a time without schoolwork and chores. Some people collect stamps, ride horses, or play games. Think about what you enjoy doing in your free time.

Write an expository essay that explains how you spend your free time.

Your writing should:

- state a thesis or purpose
- have an introduction, transitions, and conclusion
- include supporting details, facts, examples, or descriptions

Remember to edit for spelling, grammar, punctuation, and capitalization.

Go On 

WRITING

DIRECTIONS:

Use the prewriting and planning space below for notes, lists, webs, outlines, and anything else that might help you plan your writing.

Prewriting and Planning

Go On 

DIRECTIONS:

Write your draft on the following lines. Refer to the writing prompt and your prewriting and planning space as you write your draft.

Draft

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Go On 

[illegible]

Released 1-7-08

DIRECTIONS:

Now you are going to revise your draft. Read your draft, then use the questions in the Writer's Checklist as a guide to make your changes. Check each box if you can answer "yes" to that question.

Writer's Checklist

Are my ideas clear?

Does my writing have words that make it interesting?

Does my writing have a clear beginning, middle, and ending?

Does my writing sound right and make sense?

Did I edit for capital letters?

Did I edit for correct punctuation?

Did I edit for correct spelling?

If you left any box in the checklist blank, think about ways to make your writing better.

DIRECTIONS:

For each box you did not check, make a change on your draft. Then write your final version in your Test Book /Answer Document.



READING

Directions:**Read the passage. Then answer Numbers 1 through 9.**

LEXILE: 680L

The Missing Socks

Jessica sat on the sunlit stairs unsuccessfully trying to focus on her latest Anna Sleuth mystery. It was the first day of spring break, and all of her friends were hanging out at the mall. She had broken her foot two days ago while playing in the final soccer match of the season. She was stuck at home with only her parents and her annoying little brother for company. She shifted her foot, accidentally banging the cast against the stair rail. *Argh!* She hated the thing! It weighed a ton, and her foot ached. She thought she was going to die of boredom before the week was over.

Her little brother Brian was watching pirate cartoons. He was okay most of the time, but Jessica got tired of him shouting "Yo, Ho, Ho" and chasing her with his imaginary sword. Mom came down the stairs, stepping carefully over Jessica. "Honey, have you seen my blue T-shirt? It's missing."

Jessica shook her head without looking up, "Sorry Mom, I haven't seen it."

Dad came out of the kitchen a few minutes later with a cup of coffee in one hand.

"Hi, Punkin. How's my favorite girl?"

Jessica clumped down the stairs awkwardly. "This story is really cool, Dad," she said as she followed him into the living room. "Anna finds buried treasure, and . . ."

Her dad was walking around the living room looking under papers, lifting the couch cushions, and mumbling to himself, "I've lost my tie, the red one with the black stripes."

Jessica helped her dad look for his tie, but it was nowhere to be found. She peeked in on Brian, who was stretched out on his stomach in front of the TV. She was going to ask him if he had seen Dad's tie but thought better of it. Unfortunately, Brian saw her and jumped up. "Ahoy, matey!" he shouted at her. He danced around her and swished his pretend sword.


"Cut it out, or I'll nail you with my cast," she said. He ignored her and continued jumping around.

"Avast, ye landlubber!" he shouted. He loved tormenting Jessica.

Jessica rolled her eyes, thumped upstairs, and flopped across her bed. One bare foot waved in the air, and her head hung over the edge of the bed. Jessica's gaze fell on her dresser. Then she looked at the dresser more closely. This morning there had been a pair of brand new silver metallic socks on it. She had bought them the day before she broke her foot. Now they were gone.

Jessica looked carefully around her room. She looked beside the dresser and behind it. She lay down cautiously and peered under the bed. It was dusty under there and full of dog hair, but there were no socks. Jessica hobbled to her desk to look under the books and papers, but the socks weren't there either.

"Mom's T-shirt, Dad's tie, and my socks. What's going on here?" Jessica muttered. Well, maybe I should investigate, she thought to herself.

Go On 

The first thing to do was to look for clues. She carefully examined the top of the dresser. There was a small piece of dirt where her socks had been.

"What would Anna do next?" she said aloud. A piece of dirt didn't tell her much. She took a small notebook and a pencil out of her book bag and went to find Dad.

"Okay, Dad, where do you last remember seeing your tie?" asked Jessica.

"It was on the coffee table in the living room," Dad answered.

Jessica carefully inspected the area. The only unusual thing was a small, purple spot. Jessica cautiously sniffed at it and touched it with one finger. It looked like grape jelly. She sniffed it again. "Yup, grape jelly," she said.

Her dog Rembrandt sat beside the coffee table licking his paw. He was a white dog with haphazard splotches of black and brown that made him look as though someone had thrown a paint palette at him. That was why they named him after Rembrandt, the famous artist.

Jessica went upstairs and found her mom. "Where did you last see your T-shirt, Mom?" she asked.

"Hmmm," said Mom. "I think I last saw it on the bathroom vanity." Mom headed outside, and Jessica sat down at the top of the stairs to look at the clues written in her notebook.

- Blue T-shirt
- Red tie with black stripes
- Silver socks
- Dirt
- Jelly

Everything that is missing is something that people wear, thought Jessica. In Anna Sleuth, treasure was stolen. Who would want to steal clothes? And how did the dirt and jelly figure into the picture? Jessica considered the clues, then suddenly it became clear to her. Of course! Dirt! Something was buried!

Jessica hobbled down the stairs and out to the backyard. Dad was cutting the grass, and Mom was weeding the garden. Jessica walked slowly around the yard. In the corner by the potting shed was a new mound of dirt. Jessica didn't bother to get a trowel. She just dug in with her hands. In just a few minutes, she located everything that they had lost.

Jessica showed Mom and Dad what she had discovered. They were happy that the missing items were found, but they were a little bit disgusted with the dirt. Just then, Brian came out of the house eating bread and grape jelly. "AH-HA!" Jessica shouted. "You're the one who buried the clothes in the garden. You were playing pirate again!"

Brian stopped in mid-bite. "I may be a pirate, but I'm not a dog," he said.

"What do you mean?" said Jessica. "Didn't you put these here?"

Brian shook his head.

"But what about the grape jelly?" she continued.

Brian looked at his sandwich. "Dad gave it to me."

Jessica looked at Dad. He shrugged and said, "Brian was hungry." Just then, out of the house bounded Rembrandt, dragging Brian's teddy bear.

- 1.** Based on the passage, what is a trowel used for?

 - A** digging
 - B** drying
 - C** kneeling
 - D** writing

- 2.** Which clue does Jessica overlook?

 - A** Dad lifts the cushion from the couch.
 - B** Brian swings his imaginary sword at her.
 - C** Mom steps carefully over her on the stairs.
 - D** Rembrandt sits beside the table licking his paw.

- 3.** In this passage, Jessica shows qualities necessary for becoming

 - A** a writer
 - B** a detective
 - C** a babysitter
 - D** a soccer player

Go On 

- 4.** What is the main conflict in the passage?
- A** Jessica's family is missing items of clothing.
 - B** Jessica is being chased and tormented by Brian.
 - C** Jessica is stuck at home during her spring break.
 - D** Jessica's foot is broken and she is wearing a cast.
- 5.** Which detail from the passage shows the climax?
- A** Jessica sees Rembrandt with the teddy bear.
 - B** Jessica makes a list of clues in her notebook.
 - C** Jessica finds a spot of grape jelly on the table.
 - D** Jessica sees a small piece of dirt on top of the dresser.
- 6.** Why does Jessica accuse Brian of burying the clothes?
- A** He is playing pirate.
 - B** He is tormenting her.
 - C** He is watching cartoons.
 - D** He is constantly shouting.

- 7.** Read this sentence from the passage.

The only unusual thing was a small, purple spot.

What type of mood does this sentence create?

- A** frightening
- B** gloomy
- C** mysterious
- D** relaxed

- 8.** What is the author's purpose for writing this passage?

- A** to entertain readers with an amusing story
- B** to persuade readers to search for treasure
- C** to instruct readers on how to solve a problem
- D** to inform readers about ways to spend vacations

- 9.** Which detail does **not** lead to the resolution of the story?

- A** Mom's missing blue T-shirt
- B** dirt where the socks had been
- C** dust and dog hair under the bed
- D** Dad's missing red tie with black stripes



AIMS Grade 6 Released Items

Item	Reading Item Data							
1	Item Number	3297647	Correct Answer	A	P-Value	.72	Equated Rasch Value	-0.3656
	2003 Reading Standard Alignment is Strand 1 – Concept 4 – Performance Objective 2							
	<p>Based on the passage, what is a <u>trowel</u> used for?</p> <p>A digging</p> <p>B drying</p> <p>C kneeling</p> <p>D writing</p>							
2	Reading Item Data							
	Item Number	3297649	Correct Answer	D	P-Value	.73	Equated Rasch Value	-0.2731
	2003 Reading Standard Alignment is Strand 1 – Concept 6 – Performance Objective 7							
3	Reading Item Data							
	Item Number	3297648	Correct Answer	B	P-Value	.81	Equated Rasch Value	-0.9513
	2003 Reading Standard Alignment is Strand 1 – Concept 6 – Performance Objective 7							
	<p>In this passage, Jessica shows qualities necessary for becoming</p> <p>A a writer</p> <p>B a detective</p> <p>C a babysitter</p> <p>D a soccer player</p>							

AIMS Grade 6 Released Items

4	Reading Item Data							
	Item Number	3297650	Correct Answer	A	P-Value	.73	Equated Rasch Value	-0.4569
	2003 Reading Standard Alignment is Strand 2 – Concept 1 – Performance Objective 1							
<p>What is the main conflict in the passage?</p> <p>A Jessica’s family is missing items of clothing.</p> <p>B Jessica is being chased and tormented by Brian.</p> <p>C Jessica is stuck at home during her spring break.</p> <p>D Jessica’s foot is broken and she is wearing a cast.</p>								
Item	Reading Item Data							
5	Reading Item Data							
	Item Number	3297651	Correct Answer	A	P-Value	.36	Equated Rasch Value	1.7480
	2003 Reading Standard Alignment is Strand 2 – Concept 1 – Performance Objective 1							
<p>Which detail from the passage shows the climax?</p> <p>A Jessica sees Rembrandt with the teddy bear.</p> <p>B Jessica makes a list of clues in her notebook.</p> <p>C Jessica finds a spot of grape jelly on the table.</p> <p>D Jessica sees a small piece of dirt on top of the dresser.</p>								
6	Reading Item Data							
	Item Number	3297655	Correct Answer	A	P-Value	.80	Equated Rasch Value	-0.8459
	2003 Reading Standard Alignment is Strand 2 – Concept 1 – Performance Objective 3							
<p>Why does Jessica accuse Brian of burying the clothes?</p> <p>A He is playing pirate.</p> <p>B He is tormenting her.</p> <p>C He is watching cartoons.</p> <p>D He is constantly shouting.</p>								

AIMS Grade 6 Released Items

7	Reading Item Data							
	Item Number	3297660	Correct Answer	C	P-Value	.88	Equated Rasch Value	-1.4985
2003 Reading Standard Alignment is Strand 2 – Concept 1 – Performance Objective 6								
<p>Read this sentence from the passage.</p> <p style="text-align: center;">The only unusual thing was a small, purple spot.</p> <p>What type of mood does this sentence create?</p> <p>A frightening</p> <p>B gloomy</p> <p>C mysterious</p> <p>D relaxed</p>								
8	Reading Item Data							
	Item Number	3297661	Correct Answer	A	P-Value	.51	Equated Rasch Value	0.7919
2003 Reading Standard Alignment is Strand 3 – Concept 1 – Performance Objective 4								
<p>What is the author's purpose for writing this passage?</p> <p>A to entertain readers with an amusing story</p> <p>B to persuade readers to search for treasure</p> <p>C to instruct readers on how to solve a problem</p> <p>D to inform readers about ways to spend vacations</p>								
9	Reading Item Data							
	Item Number	3297658	Correct Answer	C	P-Value	.78	Equated Rasch Value	-0.5967
2003 Reading Standard Alignment is Strand 2 – Concept 1 – Performance Objective 1								
<p>Which detail does not lead to the resolution of the story?</p> <p>A Mom's missing blue T-shirt</p> <p>B dirt where the socks had been</p> <p>C dust and dog hair under the bed</p> <p>D Dad's missing red tie with black stripes</p>								

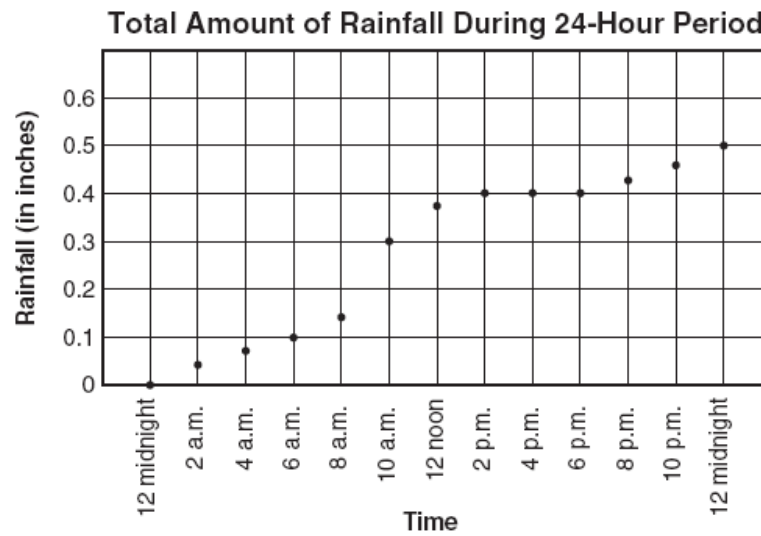
MATHEMATICS

Mathematics**DIRECTIONS:** Read each question and choose the best answer.

1. Forty percent of Ms. Liu's class returned their field trip permission slips on Friday. What fraction of the class returned their field trip permission slips on Friday?
- A $\frac{1}{5}$
- B $\frac{1}{4}$
- C $\frac{2}{5}$
- D $\frac{2}{3}$
2. David is going to buy two new hats. Including tax, one hat costs \$7.49, and the other hat costs \$8.32. If David gives the cashier a \$20 dollar bill, how much change should David get?
- A \$4.18
- B \$4.19
- C \$15.71
- D \$15.81

Go On 

3. The graph below shows the total amount of rainfall in a city during a 24-hour period.



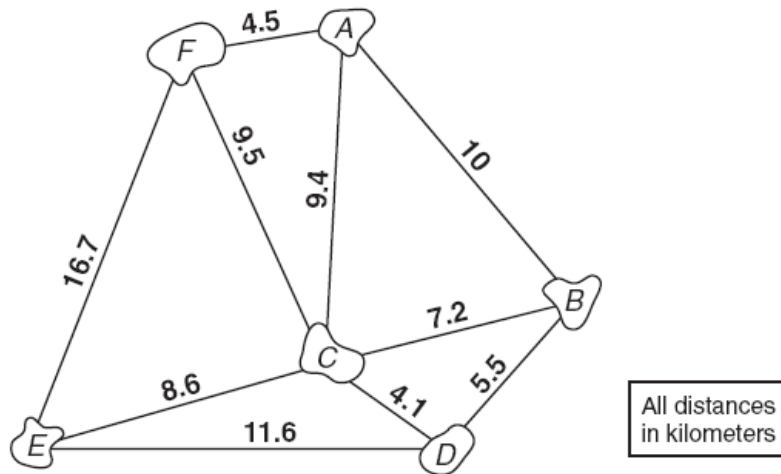
During which two-hour period did the total amount of rainfall remain the same?

- A 4 a.m. to 6 a.m.
 - B 8 a.m. to 10 a.m.
 - C 4 p.m. to 6 p.m.
 - D 10 p.m. to 12 midnight
4. What is the value of the expression below when $n = \frac{6}{7}$?

$$\boxed{n - \frac{3}{7}}$$

- A $\frac{2}{7}$
- B $\frac{3}{7}$
- C $\frac{4}{7}$
- D $\frac{9}{7}$

5. Visitors on a boat will travel to a group of islands. The vertex-edge graph below shows islands A, B, C, D, E, and F.

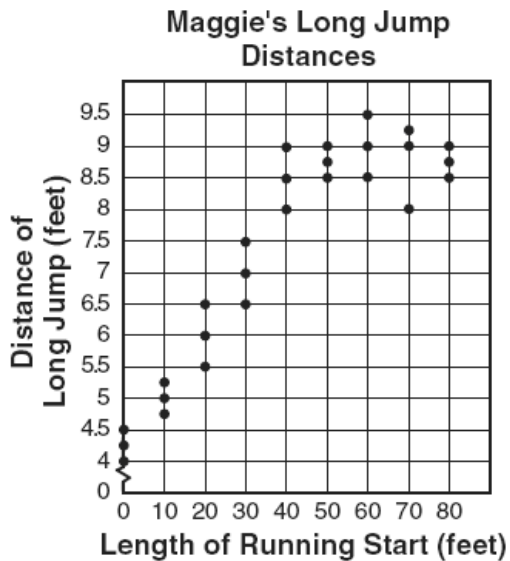


Note: The figure is not drawn to scale

Using the vertex-edge graph, which of these is the shortest route from island A to island E?

- A** $A \rightarrow C \rightarrow E$
 - B** $A \rightarrow F \rightarrow E$
 - C** $A \rightarrow B \rightarrow C \rightarrow E$
 - D** $A \rightarrow C \rightarrow D \rightarrow E$
6. Which shape is a quadrilateral?
- A** hexagon
 - B** parallelogram
 - C** pentagon
 - D** triangle

7. Maggie made the scatter plot below to record the distances she jumped with different running start lengths.



Which is the distance of Maggie's longest jump when she had a running start of 20 feet?

8. Matthew, Cory, Jordan, and Travis each own a different pet. The pets are a bird, a cat, a goldfish, and a hamster. Some clues about the pets are listed below.
- Matthew's pet cannot fly.
 - The hamster belongs to a person with the letter "o" in his name.
 - Jordan's pet does not have fur.
 - The cat does not belong to Travis.

Based on the clues, which pet does Matthew own?

- A bird
- B cat
- C goldfish
- D hamster

Go On 

9. Peyton was given the division problem below to work.

$$1.7 \overline{)1.75}$$

Her work is shown below.

$$\text{Step 1} \quad 17 \overline{)175}$$

$$\text{Step 2} \quad 17 \overline{)175}$$

$$\text{Step 3} \quad 17 \overline{)175.1}$$

$$\text{Step 4} \quad 17 \overline{)175.10}$$

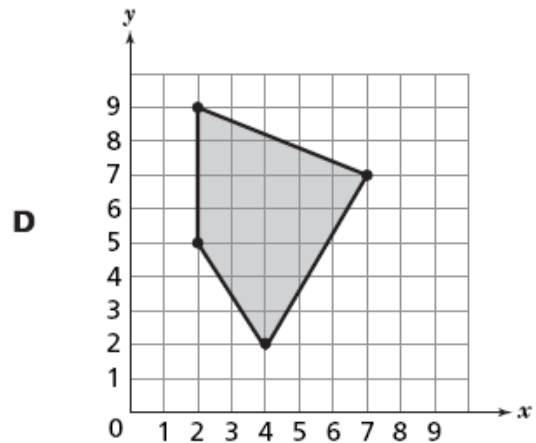
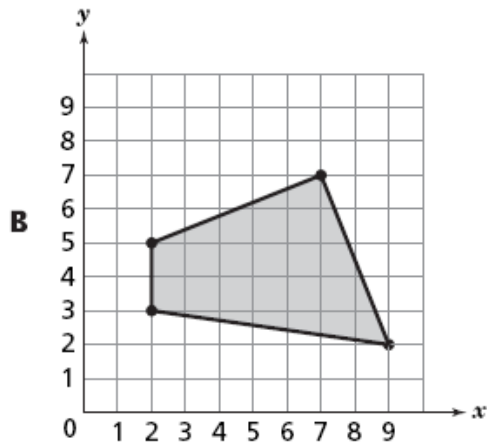
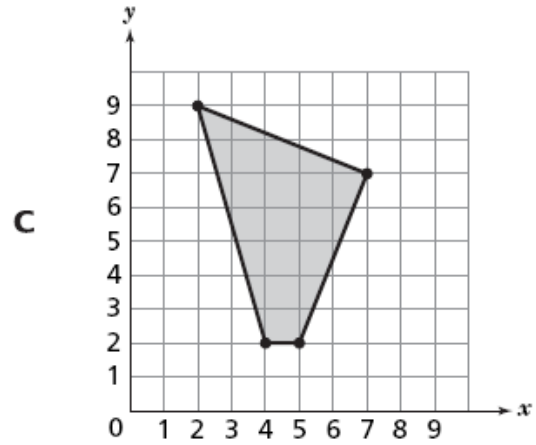
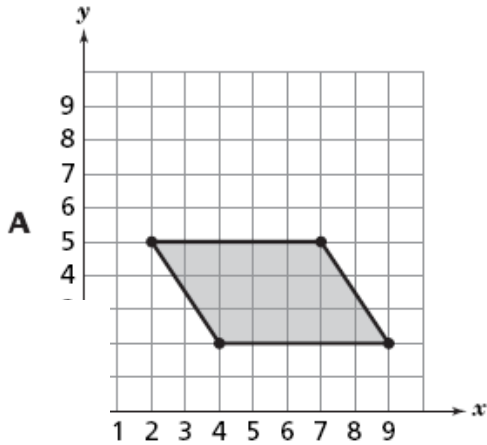
At which step did Peyton make her first mistake?

- A** Step 1
- B** Step 2
- C** Step 3
- D** Step 4

10. Mary used the four points below as vertices of a polygon.

$(2, 5)$, $(4, 2)$, $(7, 7)$, $(2, 9)$

Which could be Mary's polygon?



AIMS Grade 6 Released Items

Item	Mathematics Item Data																																		
1	Item Number	3142515	Correct Answer	C	P-Value	.60	Equated Rasch Value	-0.2856																											
	2003 Mathematics Standard Alignment is Strand 1 – Concept 1 – Performance Objective 4																																		
	Forty percent of Ms. Liu’s class returned their field trip permission slips on Friday. What fraction of the class returned their field trip permission slips on Friday? A $\frac{1}{5}$ B $\frac{1}{4}$ C $\frac{2}{5}$ D $\frac{2}{3}$																																		
2	Item Number	3147379	Correct Answer	B	P-Value	.69	Equated Rasch Value	-0.6085																											
	2003 Mathematics Standard Alignment is Strand 1 – Concept 2 – Performance Objective 14																																		
	David is going to buy two new hats. Including tax, one hat costs \$7.49, and the other hat costs \$8.32. If David gives the cashier a \$20 dollar bill, how much change should David get? A \$4.18 B \$4.19 C \$15.71 D \$15.81																																		
3	Item Number	3261835	Correct Answer	C	P-Value	.74	Equated Rasch Value	0.0050																											
	2003 Mathematics Standard Alignment is Strand 2 – Concept 1 – Performance Objective 4																																		
	The graph below shows the total amount of rainfall in a city during a 24-hour period. <div><p style="text-align: center;">Total Amount of Rainfall During 24-Hour Period</p><table border="1"><caption>Data for Total Amount of Rainfall During 24-Hour Period</caption><thead><tr><th>Time</th><th>Rainfall (in inches)</th></tr></thead><tbody><tr><td>12 midnight</td><td>0.0</td></tr><tr><td>2 a.m.</td><td>0.05</td></tr><tr><td>4 a.m.</td><td>0.08</td></tr><tr><td>6 a.m.</td><td>0.1</td></tr><tr><td>8 a.m.</td><td>0.15</td></tr><tr><td>10 a.m.</td><td>0.3</td></tr><tr><td>12 noon</td><td>0.38</td></tr><tr><td>2 p.m.</td><td>0.4</td></tr><tr><td>4 p.m.</td><td>0.4</td></tr><tr><td>6 p.m.</td><td>0.4</td></tr><tr><td>8 p.m.</td><td>0.45</td></tr><tr><td>10 p.m.</td><td>0.48</td></tr><tr><td>12 midnight</td><td>0.5</td></tr></tbody></table></div> During which two-hour period did the total amount of rainfall remain the same? A 4 a.m. to 6 a.m. B 8 a.m. to 10 a.m. C 4 p.m. to 6 p.m. D 10 p.m. to 12 midnight								Time	Rainfall (in inches)	12 midnight	0.0	2 a.m.	0.05	4 a.m.	0.08	6 a.m.	0.1	8 a.m.	0.15	10 a.m.	0.3	12 noon	0.38	2 p.m.	0.4	4 p.m.	0.4	6 p.m.	0.4	8 p.m.	0.45	10 p.m.	0.48	12 midnight
Time	Rainfall (in inches)																																		
12 midnight	0.0																																		
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12 noon	0.38																																		
2 p.m.	0.4																																		
4 p.m.	0.4																																		
6 p.m.	0.4																																		
8 p.m.	0.45																																		
10 p.m.	0.48																																		
12 midnight	0.5																																		

AIMS Grade 6 Released Items

4

Item Number	3142463	Correct Answer	B	P-Value	.58	Equated Rasch Value	-0.0862
2003 Mathematics Standard Alignment is Strand 3 – Concept 3 – Performance Objective 1							

What is the value of the expression below when $n = \frac{6}{7}$?

$$n - \frac{3}{7}$$

A $\frac{2}{7}$
B $\frac{3}{7}$
C $\frac{4}{7}$
D $\frac{9}{7}$

5

Item Number	3261886	Correct Answer	A	P-Value	.74	Equated Rasch Value	-0.3449
2003 Mathematics Standard Alignment is Strand 2 – Concept 4 – Performance Objective 1							

Visitors on a boat will travel to a group of islands. The vertex-edge graph below shows islands A, B, C, D, E, and F.

All distances in kilometers

Note: The figure is not drawn to scale

Using the vertex-edge graph, which of these is the shortest route from island A to island E?

A $A \rightarrow C \rightarrow E$
B $A \rightarrow F \rightarrow E$
C $A \rightarrow B \rightarrow C \rightarrow E$
D $A \rightarrow C \rightarrow D \rightarrow E$

AIMS Grade 6 Released Items

6

Item Number	3277797	Correct Answer	B	P-Value	.67	Equated Rasch Value	-0.1397
2003 Mathematics Standard Alignment is Strand 4 – Concept 1 – Performance Objective 1							

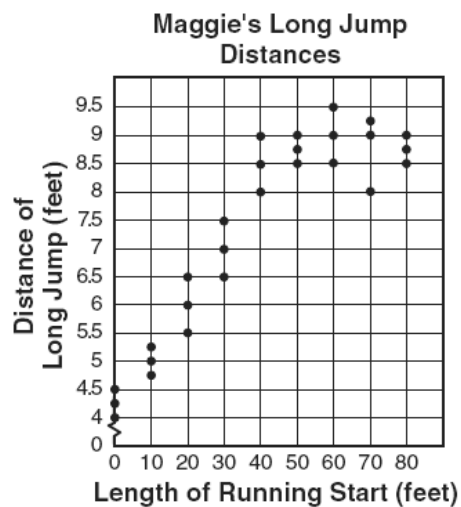
Which shape is a quadrilateral?

- A hexagon
- B parallelogram
- C pentagon
- D triangle

7

Item Number	3279066	Correct Answer	C	P-Value	.79	Equated Rasch Value	-0.3358
2003 Mathematics Standard Alignment is Strand 3 – Concept 4 – Performance Objective 1							

Maggie made the scatter plot below to record the distances she jumped with different running start lengths.



Which is the distance of Maggie's longest jump when she had a running start of 20 feet?

- A 4.5 feet
- B 6 feet
- C 6.5 feet
- D 9 feet

AIMS Grade 6 Released Items

8	Item Number	3277883	Correct Answer	B	P-Value	.70	Equated Rasch Value	0.1439	
	2003 Mathematics Standard Alignment is Strand 5 – Concept 2 – Performance Objective 1								
<p>Matthew, Cory, Jordan, and Travis each own a different pet. The pets are a bird, a cat, a goldfish, and a hamster. Some clues about the pets are listed below.</p> <ul style="list-style-type: none">Matthew’s pet cannot fly.The hamster belongs to a person with the letter “o” in his name.Jordan’s pet does not have fur.The cat does not belong to Travis. <p>Based on the clues, which pet does Matthew own?</p> <p>A bird</p> <p>B cat</p> <p>C goldfish</p> <p>D hamster</p>									

9	Item Number	3278016	Correct Answer	B	P-Value	.39	Equated Rasch Value	1.4796	
	2003 Mathematics Standard Alignment is Strand 5 – Concept 1 – Performance Objective 2								
<p>Peyton was given the division problem below to work.</p> <p>$.7 \overline{)1.75}$</p> <p>He _____ own below.</p> <p>$\begin{array}{r} .7 \overline{)1.75} \\ \underline{.7} \\ .0 \end{array}$</p> <p>Step 2 $17. \overline{)175}$</p> <p>Step 3 $17. \overline{)175} \begin{array}{r} .1 \\ \hline \end{array}$</p> <p>Step 4 $17. \overline{)175} \begin{array}{r} .10 \\ \hline \end{array}$</p> <p>At which step did Peyton make her first mistake?</p> <p>A Step 1</p> <p>B Step 2</p> <p>C Step 3</p> <p>D Step 4</p>									

10

Item Number	3498377	Correct Answer	D	P-Value	.81	Equated Rasch Value	-0.6363
2003 Mathematics Standard Alignment is Strand 4 – Concept 3 – Performance Objective 1							

Mary used the four points below as vertices of a polygon.

$(2, 5)$, $(4, 2)$, $(7, 7)$, $(2, 9)$

Which could be Mary's polygon?

